

UNITED STATES DEPARTMENT OF AGRICULTURE
Rural Utilities Service
Technical Standards Committee "A"

Supplement No. 1, October 2002, to
RUS Informational Publication 202-1,
List of Materials Acceptable for Use on
Systems of RUS Electrification Borrowers

The attached pages dated October 2002, for the "List of Materials Acceptable for Use on Systems of RUS Electrification Borrowers" are those which have been revised by action of the Technical Standards Committees during the months of July through September, 2002. They replace pages dated July 2002. The following changes should be made in order to keep RUS Informational Publication 202-1 up to date.

<u>Remove Old Page</u>	<u>Add New Page</u>
k(2.1) Cond.:l-1	k(2.1) Cond.:l-1
v-1:v-2	v-1:v-2
dl-1:dm-1	dl-1:dm-1
fl-1:fj,fk,fl	fl-1:fj,fk,fl
fm,fn:fo-1	fm,fn:fo-1
gj(1) Cond.:gw-1	gj(1) Cond.:gw-1
U ja-1:U ja-2	U ja-1:U ja-2

**THIS PAGE IS
INTENTIONALLY
BLANK**

k - Insulator, polymer distribution deadend

Manufacturer	Conditions
<u>Salisbury</u>	
Distribution deadend	1. To obtain experience.
9501 Series, 15 kV	2. For use as deadends on distribution lines only.
9502 Series, 25 kV	3. Not recommended for use in areas subject to contamination.
9501U-SI (silicone - 15 kV)	
9502U-SI (silicone - 28 kV)	
9503U-SI (silicone - 35 kV)	
9502L-EP (EPDM - 28 kV)	
<u>Sediver</u>	
Distribution deadend	1. Same as (1) above.
ODI-11-70-15 (15 kV)	2. Same as (2) above.
ODI-15-70-28 (25 kV)	3. Same as (3) above.
ODI-17-70-35 (35 kV)	
<u>Victor Insulators, Inc.</u>	
Distribution deadend	1. Same as (1) above.
8015 (15kV)	2. Same as (2) above.
8025 (25kV)	3. Same as (3) above.
8035 (35kV)	
8215 (15kV)	
8225 (25kV)	
8235 (35kV)	
<u>Volttek</u>	
Distribution deadend	1. Same as (1) above.
1515-00 (15 kV)	2. Same as (2) above.
	3. Same as (3) above.

NOTE: When insulators from this page are used, adjust construction drawing material list quantities as necessary. Recommended maximum working load is 5000 lbs.

I - Clamp, deadend

DISTRIBUTION

<u>Copper 2 through 6</u> <u>CWC 4A through 8A</u>		ACSR (Aluminum Clamps)			
		<u>4/0 & 3/0</u>	<u>2/0</u>	<u>1/0</u>	<u>2&4</u>
-	Alcoa	302	302	302	302
80500-2000	Hubbell (Anderson)	PG-57N	PG46N	PG-46N	PG-46N
-	C & R	CR-20-90	CR-10-90	CR-10-90	CR-10-90
-	Lapp	306120N	306118N	306118N	306118N
-	MacLean (Bethea)	DA-20N	DA-15-N	DA-15-N	DA-15-N

v - Guy Attachment
for 5/8" bolt

Type:	Formed Strap	Angle Bolt Eye	Guy Hook	Guy Hook*
Maximum Working Load Rating	23,130 N (5200 lbs.)	23,130 N (5200 lbs.)	23,130 N (5200 lbs.)	37,800 N (8500 lbs.)
Cooper Power Systems	DG6H1	DG11E1	DG21H2	-
Dixie	D5004	D0100	DD-9460	DD-9462
Hubbell (Chance)	5004	0100	-	GH5
Joslyn	J25164	J6500	J6555 J6556	-
Joslyn (Flagg)	-	-	-	P151X
Kortick	K4035 K4047	K3140	-	-
Line Hardware	-	-	-	HGA-58C
MacLean (Bethea)	-	-	-	AG-5
MacLean (Continental)	U31030	U5531	GAD	GAD-56-4
Power Play Products	-	-	-	B58GH
Universal Electric	-	-	-	UGA-56C

*This hook may be used in place of the wrapped guy arrangement in assemblies E3-2 and E3-3.

Pole Eye Plates
(5/8" Bolt)

Type	Pole Eye Plate
Maximum Working Load Rating	37,800 N. (8500 lbs.)
Joslyn (Flagg)	PX88
Hubbell (Anderson)	GSP-05
Line Hardware	PGA-548
MacLean (Bethea)	PE5-6A
MacLean (Continental)	PEP-66-45

dl - Pipe Spacer

3/4" diameter x 1-1/2" length

<u>Manufacturer</u>	<u>Catalog Number</u>
Dixie	D2031
Hubbell (Chance)	2237
Joslyn	J2031
MacLean (Continental)	U36695

dm - Bracket, transformer
(For cluster mounting of two or three transformers on pole)

Manufacturer	Transformer Size, kVA	Band Type	Through Bolt Type
Aluma-Form	3-50 75-100	6M3-6 15M3-6	3MW-24-M 11MW-24
Barfield Manufacturing Co.	3-50 75-100	BMAC-366 BMAC-3156	- -
Cooper Power Systems	3-25 DT25CI 37 1/2-50 75-100	(Use 3 no. DTI7AI Adapter Plates) DT25C4 DT25C4	DT6CI DT7CI DT8CI
Dixie	3-25 37-1/2-50 75-100	- - -	DW-50 DW-50 DW-167
Hubbell (Chance)	3-50 75-100	C6M3-6 C15M3-6	- -
Hughs	3-25 37-1/2-50 75-100	- - -	3021 3020 3020 with adapter plates and back plate
Joslyn	3-25 37-1/2-50 75-100	- - -	J6865 J6864 J6866
Turner	3-25 37-1/2-50 75-100	- - -	305-25 305-100 305-100

For mounting of two transformers

Aluma-Form	3-100	-	DM-4M2
	3-50	-	DM-2M2
Hubbell (Chance)	3-100	-	C212-0001
Hughes	3-50	-	3022
Turner	3-50	-	205-25

fi - Connectors, hot line

Over Armor Rods

<u>Manufacturer</u>	<u>Catalog Number or Series (Al to Al)</u>	<u>Catalog Number or Series (Al to Cu)</u>
Blackburn	PGH	-
Hubbell (Anderson)	AC Series	AC-GP-Series
Hubbell (Fargo)	GA-100 Series	GA-100C Series

fj - Bracket, extension

(For use in mounting circuit reclosers or sectionalizers)

See Drawing VM3-10A

	Through Bolt Type	Band Type
Aluma-Form	TBRSM-1, TB2M1-9*	RSM-1
Dixie	D-2359-M	
Joslyn	J2357	

*For mounting double lug reclosers.

fk - Bracket, circuit recloser or sectionalizer

(For cluster mounting of three circuit reclosers on pole)

	Cluster Mount	Rack Mount
Aluma-Form	RSM-3, 6M3-9*	3SPR-66, 3SPR-84
*Cooper Power Systems	DT8C1	
Turner	695-3	

*Suitable for 14.4 and heavy duty 7.2 kV.

fl - Rack, primary metering

(For cluster mounting of primary metering equipment on pole)

Aluma-Form	PMM Series
Barfield Manufacturing Co.	BAPMM6
Turner	3CT-PT

fm - Extension Bracket for Mounting Apparatus
(Arrester, Cutouts and Potheads for Distribution Pole Mounting)

Manufacturer	Application Voltage	Single Phase	Three Phase
Aluma-Form	12.5/7.2 kV	1HCA-18 Series	R3CA-48
		1HCA-C-18	
	24.9/14.4 kV	WBMA-1	R3CSA-48
Barfield Mfg. Co.	12.5/7.2 kV	BAC 1256	
	24.9/14.4 kV	BAC 1710	
	12.5/7.2 kV	BACA 126 (double mounting)	
	24.9/14.4 kV	BACA 1710 (double mounting)	
Dixie	12.5/7.2 kV	D-1580	D27211-G
	24.9/14.4 kV	D-1583	-
Hubbell (Anderson)	12.5/7.2 kV	COB-E-120-TGL	-
	24.9/14.4 kV	ACOB-E-180	-
		COB-E-180-TGL	-
Hubbell (Chance)	24.9/14.4 kV	C653-1038	C653-1056
Hughes Brothers	12.5/7.2 kV	892-18	670-40
	24.9/14.4 kV		
Joslyn (Flagg)	12.5/7.2 kV	PA613B	7510-730
	24.9/14.4 kV	PA619B	7510-740-17
Line Hardware	12.5/7.2 kV	CA-12-3GL	-
MacLean (Bethea)	12.5/7.2 kV	VIB3-18-R1-GC-C	
		VIB3-12F-GC	
	24.9/14.4	VIB3-18-GC	
MacLean (Continental)	12.5/7.2 kV	IACB-12-5LGE	GPB-3-0-568M-3012-CAT 12
	24.9/14.4	IACB-18-5LGE	GPB-3-0-568M-4017-CAT 12
Modern Aluminum	12.5/7.2 kV	V183-12	
Universal Electric	24.9/14.4 kV	SAB-3-18-GC	

Note: Above brackets are not suitable for supporting nor deadending distribution line conductors. (See items "eq" for narrow profile bracket and special arm assemblies.)

fn - Extension Bracket for Mounting Cutouts

Refer to item fm.

fo - Bracket, Transformer Secondary, Insulated

Manufacturer Insulator	Bracket Without Insulator	Bracket With 2-1/4" Diameter Spool Insulator	Bracket With 3-1/8" Diameter Spool
Cooper Power Systems	DT4M1	-	DT4M11
Hubbell (Chance)	-	9113S	9114S
Joslyn	-	J6765-A	J6765
Maclean (Continental)	U865	U865/208	U865/205

gj - Crossarm Assemblies

Braceless

Manufacturer	Conditions
<u>Aluma-Form</u> HD-DEA-86-EB-REA HD-2-DEA-86-EB-REA HD-DEA-108-EB-REA HD-2-DEA-108-EB-REA	To obtain experience.
<u>Geotek (PUI)</u> DA2500-96 DA2500-120 DA3000-96 DA3000-120	To obtain experience.
<u>Hughes Brothers</u> 3377-A7.5 3377-A8.5 3377-A9.5	To obtain experience.
<u>MacLean Power Systems</u> PZ08LD PZ10LD PY08SD PY10SD	To obtain experience.
<u>Shakespeare</u> IDB096N1224(X)RUS** XDB096N1224(X)RUS** (**X=2-Gray Color 5-Dark Bronze Color)	To obtain experience

gw-1
July 2002

gw - Crossarm Assembly for H-Frame Construction

Applicable Specification: RUS Specification T-7, Revision dated November 1962
Applicable Drawing: TH-11B Series (161 kV maximum)
No braces (TH-11B)
Two vee braces on outside (TH-11BVO)
Two vee braces on inside (TH-11BVI)
Four vee braces (TH-11BV4)

3-5/8" x 9-3/8" x 33' wood crossarm assembly complete with
attaching hardware, fittings, bolts and 3-3/8" x 5-3/8" braces.

Catalog Nos. or Drawing Nos.

	TH-11B	TH-11BVO	TH-11BVI	TH-11BV4
	<u>Items</u>	<u>Items</u>	<u>Items</u>	<u>Items</u>
(Assemblies)	gw	gw and vo	gw and vi	gw and vv
Brooks (1,2)	6411	6411-1	6411-2	6411-3
Hughes Bros.(1,2)	C3316-B	C3316-B	C3316-B	C3316-B
Pennington (1,2)	CCC11B72	CCC11B72-VO	CCC11B72-VI	CCC11B72-V4

- 1 - Fixed spacer fitting sizes as required
2 - Adjustable spacers are available

U ja - Equipment Flat Pad*

Manufacturer	Catalog Number
<u>Armorcast</u>	600 Series, Polymer Concrete P600XXXX Rotocast, LLDPE
<u>Associated Plastics</u>	API 4000 Series RPM
<u>Carolina Dielectrics</u>	Model 0502-1, Fiberglass, Size:40"x44"
<u>CDR Systems (Homac)</u>	PP Series, Fiber reinforced polymer concrete
<u>Diversitech</u>	TP Series - Fiberglass reinforced concrete
<u>Electri-Glass</u>	Fiberglass LP-4145, 41" x 45"
<u>Electrical Materials</u>	Molded HMW Polyethylene Model 64-3BC, 42" x 41" x 4" Model 65-4BC, 52" x46"
<u>Electrimold</u>	EPPT
<u>Fiberglas Fabricators</u>	FFBPPC Series, Polymer concrete hybrid
<u>Formex</u>	Mode1 TP-REA, Molded polyethylene
<u>Heil Rotomold, Inc.</u>	T Series, High density polyethylene
<u>Highline</u>	HL-46B, Fiberglass, Size: approx.42"x42"
<u>Hubbell (Chance)</u>	C107-0162 Fiberglass, Size: 40" x 44"
<u>Major Frame-Crete</u>	ETPP precast, cellular concrete, 42"x42"
<u>Nordic</u>	TP Series, Fiberglass
<u>PenCell Plastics</u>	TP-4220, TP-4224, TP-4227
<u>Quality Rubber Company</u>	34242 light-weight concrete
<u>Quazite Corp.</u>	Composolite - PH Series
<u>RMI-D</u>	Dwg. No. 730126-2, Molded polyethylene Size: 42" x 42"
<u>Smith Cattleguard</u>	Easi Set T. Series, Precast Reinforced Concrete
<u>Thermodynamics</u>	Poly-Pad, PR Series, Molded polyethylene

*Order by catalog number and size.

U ja-2
July 2002

U ja - Equipment Box Pad (Sleeve)*	
Manufacturer	Catalog Number
<u>Acura Fiberglass Corp.</u>	Model AG 4532
<u>Associated Plastics</u>	Transformer pad and box assembly, API 4242 RPM Pad and 1730 Box Transformer Pads, API 16 and API 45
<u>Blue Grass Vault Company</u>	BG-PV-T, BG-PV-1, BG-PV-2
<u>Concast</u>	Fibercrete modular bases
<u>Custom Composites</u>	R Series Fiberglass
<u>D & L</u>	Fiberglass
<u>Electri-Glass, Inc.</u>	BP-2000
<u>Electrimold</u>	EFBT,EFBS,EFBG Series
<u>Fiberglas Fabricators</u>	Transformer pad and sleeve assembly, FFBP series
<u>Formex</u>	Transformer pad and box assembly - TP-REA Series Pad, 1730-A Series Box
<u>Highline</u>	Box pad HL-45A, Size: L-43", W-34-1/2", D-32" Model AG 4532
<u>Malton</u>	FGS Series Fiberglass ground sleeves and box pads
<u>Maysteel</u>	CW-GS-P Series
<u>Mor-Tech Fab</u>	Transformer pad ground sleeves
<u>Nordic</u>	GS Series Fiberglass (excluding GS-37-43-15-A) CBP-37-43-15-A
<u>PenCell</u>	Transformer pad and box assembly- TPS-20-PE Pad, PE-20GS Box
<u>ProGlass, Inc.</u>	TX, SR, S, and SG Series (All without optional lids)
<u>Quality Fiberglass</u>	QF Series
<u>Thermodynamics</u>	Poly Pad - VC series (VCC-P series covers available) Polyethylene

*Order by catalog number and size.